California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2001-##*

FOR

FORT BRAGG MUNICIPAL IMPROVEMENT DISTRICT NO.1
WASTEWATER TREATMENT FACILITY

Mendocino County

INFLUENT MONITORING

Flow shall be recorded continuously. Twenty-four-hour composite samples shall be taken weekly at some point prior to discharge to the ocean outfall line. Samples may be taken by a flow-proportional sampling device approved by the Regional Water Board Executive Officer (Executive Officer) or by grab samples composited in proportion to flow. The sampling interval shall not exceed one hour. Samples shall be analyzed as follows:

Constituent	Units	Sample Type	Frequency
BOD_5 (20°C, 5 day)	mg/l	24-hour composite	Weekly
Suspended Solids	mg/l	24 hour composite	Weekly

EFFLUENT MONITORING

Flow shall be recorded continuously. Twenty-four-hour composite samples shall be taken weekly at some point prior to discharge to the ocean outfall line. Samples may be taken by a flow-proportional sampling device approved by the Executive Officer or by grab samples composited in proportion to flow. The sampling interval shall not exceed one hour. Samples shall be analyzed as follows:

Constituent	Units	Sample Type	Frequency
BOD_5 (20C, 5 day)	mg/l	24-hour composite	Weekly
Suspended Solids	mg/l	24 hour composite	Weekly
Settleable Solids	ml/l	Grab	Daily
Hydrogen Ion	pH	Grab	Daily
Turbidity	NTU	24-hour composite	Weekly
Chlorine Residual[1]	mg/l	Grab	Daily
Total Coliform	MPN/100 ml	Grab	Weekly
Grease and Oil	mg/l	Grab	Quarterly
Flow	mgd	Continuous	Continuous
Cadmium	mg/l	24-hour composite	Annually
Copper	mg/l	24-hour composite	Annually
Chromium (hexavalent)	mg/l	24-hour composite	Annually
Lead	mg/l	24-hour composite	Annually
Mercury	mg/l	24-hour composite	Annually
Nickel	mg/l	24-hour composite	Annually

[1] Following dechlorination

Constituent	Units	Sample Type	Frequency
Silver	mg/l	24-hour composite	Annually
Zinc	mg/l	24-hour composite	Annually
Cyanide	mg/l	24-hour composite	Annually
Ammonia (as N)	mg/l	24-hour composite	Annually
Acute Toxicity[2]	[3]	Grab	Quarterly
Chronic Toxicity[4]	Tu_c	Grab	Semi-annually
Chlorinated Phenolics	mg/l	Grab	Annually
Endosulfan	mg/l	Grab	Annually
Endrin	mg/l	Grab	Annually
HCH	mg/l	Grab	Annually

Whenever annual effluent flow for a year ending on July 31st exceeds 365 million gallons, twenty-four-hour composite samples shall be collected in August and during the following February and shall be analyzed for the following Table B constituents listed in Waste Discharge Requirements Order No. R1-2001-##*, unless a sample collected during the preceding August has been analyzed for these constituents.

Radioactivity
Acrolein
Acrylonitrile
Aldrin
Antimony
Benzene
Benzidine
Beryllium
bis(2-chloroethoxy)methane
bis(2-chloroethyl)ether
bis(2-ethylhexyl)phthalate
Cadmium
Carbon Tetrachloride
Chlordane*
Chlorinated Phenolics
Chromium (hexavalent)*
Copper

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2 The Rainbow Trout *Oncorhynchus mykiss* shall be used as the test fish. The test procedure shall be from U. S. EPA's "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" Fourth Edition.

3 Percent Survival

4 Analyses shall be performed during February and August for the first two years. During the first year monitoring events, test organisms shall include topsmelt *Atherinops affinis*, red abalone *Haliotis rufescens*, and giant kelp *Macrocystis pyrifera*. The sensitivity of these three test organisms shall be determined during the first year of testing, and subsequent chronic toxicity bioassays shall use only the critical life stage of the most sensitive of the three organisms. After the second year, monitoring frequency shall be reduced to annual analyses performed during the month of highest toxicity observed during the first two years of semi-annual monitoring. If no toxicity is observed during the first two years, annual analyses shall be performed during dry weather.

Cyanide*
DDT*
3,3'-dichlorobenzidine
Dieldrin
2,4-dinitrophenol
2,4-dinitrotoluene
1,2-diphenylhydrazine
Endosulfan
Endrin
Fluoranthene
HCH*
Heptachlor*
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Lead
Mercury
Nickel
Nitrobenzene
N-nitrosodimethylamine
N-nitrosodiphenylamine
PAHs*
PCBs*
Silver
TCDD equivalents*
Thallium
Toxaphene
Tributyltin
2,4,6-trichlorophenol
Zinc

* These analyses are further defined in footnotes under Effluent Limitation B.1. of Waste Discharge Requirements Order No. R1-2001-##*.

In the event that the Table B constituents listed above have not been analyzed during the life of this permit prior to June 1, 2005, the permittee shall collect a twenty-four-hour composite sample during June 2005 and analyze for the Table B constituents listed above. The results of the analysis shall be submitted as part of the permit renewal application to be submitted by September 23, 2005.

RECEIVING WATER MONITORING

Grab samples shall be collected not less than monthly from the surf zone near the outfall. These samples shall be analyzed for enterococcus and for total and fecal coliform organisms, with results reported as MPN per 100 mL. A second sample shall be collected within 7 days of determination that the first sample total coliform count exceeded 1000 MPN per 100 mL. When surf conditions make receiving water sampling access unsafe and prevent sample collection, monitoring reports shall specify daily NOAA wind and swell wave heights and small craft advisories or warnings for periods of missing receiving water data.

The permittee shall submit a receiving water monitoring plan not later than December 31, 2002. The Executive officer may revise this Monitoring and Reporting Program after receipt of the plan to require monitoring for compliance with Ocean Plan receiving water objectives and to reduce monitoring for any constituents where data indicates no reasonable potential to exceed effluent or receiving water limitations.

OUTFALL INSPECTION

Outfall Inspection: Divers shall visually inspect the outfall pipe and diffuser ports at least once during the life of this permit to verify operational status of the outfall. A report documenting outfall condition and maintenance, including any observed cracks, breaks, malfunctions, and appropriate repairs, shall be submitted within 90 days of completing the inspection.

SOLIDS DISPOSAL

See **D. SOLIDS DISPOSAL** in the permit for reporting requirements.

ANALYTICAL METHODS

Suitable analytical methods are those specified in 40 CFR 136 and the current edition of Standard Methods for the Examination of Water and Wastewater, unless otherwise stated. Any other protocols shall be approved by the Regional Water Board prior to use.

All analytical data shall be uncensored, with the method detection limits and either practical quantitation levels (PQLs) or limits of quantitation (LOQs) identified. Only data from certified laboratories will be accepted.

Aquatic life water quality objectives for cadmium, chromium, copper, lead, nickel, silver, and zinc are based on acid-soluble fractions. Compliance with these objectives shall be determined using the total recoverable method or a method approved by the State Water Board's Executive Director and U.S. EPA.

REPORTING

Monitoring results shall be reported on a form similar to the attached example to clearly illustrate compliance with waste discharge requirements. Monitoring reports shall be received by the Regional Water Board for each month by the first day of the second month after the month of sampling.

If the surf zone consistently exceeds receiving water limitation C.1. or exceeds a geometric mean enterococcus density of 24 organisms per 100 mL for a 30-day period or 12 organisms per 100 mL for a 6-month period, the monthly report shall include results of a survey to determine if the outfall is the source of the contamination.

Ordered by_____

Lee A. Michlin
Executive Officer

March 22, 2001 * Number will be assigned when adopted (FtBraggM&R)